

PATENT
TH1647 07 (US)
DFH:EM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the accompanying application of)
CHARLES L. EDWARDS, KIRK H. RANEY,)
and PAUL G. SHPAKOFF)

This is a division of Serial No. 10/679,174)
filed October 3, 2003 which is a divisional)
of Application Serial No. 10/025,080 filed)
December 19, 2001)

BRANCHED PRIMARY ALCOHOL)
COMPOSITIONS AND DERIVATIVES)
THEREOF)

April 2, 2004

COMMISSIONER FOR PATENTS
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.56 AND 1.97

It is respectfully requested that the documents listed on the attached Form PTO-1449 be considered by the Patent and Trademark Office in the above-entitled application and made of record therein. Copies of the referenced documents are not provided since they were previously submitted to the Office in the parent application, Serial No. 10/025,080 filed December 19, 2001.

The Examiner is requested to indicate consideration of this art on the attached PTO-1449 (Modified) by initialing next to each item submitted by the Applicants.

Respectfully submitted,

CHARLES L. EDWARDS, KIRK H. RANEY,
and PAUL G. SHPAKOFF

By _____
Their Attorney, Donald F. Haas
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Houston, Texas 77252-2463

FORM PTO-1449 (Modified)

ATTY. DOCKET NO.
TH1647 07 (US)

APPLICATION NUMBER

LIST OF INFORMATION PROVIDED
BY APPLICANT

(Use several sheets if necessary)

APPLICANT
C. L. Edwards et al.

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GROUP ART UNIT

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

| Examiner Initial | | Document No. | Date | Patentee | Class | Subclass | Filing Date if Appropriate |
|------------------|----|--------------|----------|----------------|-------|----------|----------------------------|
| | AA | 3,676,523 | 7/11/72 | Mason | 260 | 683.15D | |
| | AB | 3,686,351 | 8/22/72 | Mason | 260 | 683.15D | |
| | AC | 3,737,475 | 6/5/73 | Mason | 260 | 683.15D | |
| | AD | 3,825,615 | 7/23/74 | Lutz | 260 | 683.15D | |
| | AE | 4,020,121 | 4/26/77 | Kister et al. | 260 | 683.15D | |
| | AF | 4,021,447 | 5/3/77 | Rubin et al. | 260 | 326.8 | |
| | AG | 3,702,886 | 11/14/72 | Argauer et al. | 423 | 328 | |
| | AH | 3,709,979 | 1/9/73 | Chu | 423 | 328 | |
| | AI | 3,832,449 | 8/27/74 | Rubin et al. | | | |

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|--|----|--------------|----------|---------------|-------|----------|-------------|----|
| | | | | | | | Yes | No |
| | AL | WO 94/05761 | 3/17/94 | World | C11D | 3/10 | | |
| | AM | 1,429,143 | 3/24/76 | Great Britain | C11D | 10/02 | | |
| | AN | WO 99/42553 | 8/26/99 | World | C11D | 3/43 | | |
| | AO | 0,884,298 A2 | 12/16/98 | Europe | C07C | 43/10 | X | |

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

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| | AR | Myers, Drew, "Surfactant Science and Technology," pp. 82-85, VCH Publishers, Inc. (New York, NY, USA) 1988 (ISBN 0-89573-399-0) |
| | AS | K. Shinoda, "Principles of Solution and Solubility," translation in collaboration with Paul Becher, published by Mercel Dekker, Inc. 1978, pp. 292-304 |
| | AT | Reid, V.W., G.F. Longman and E. Heinerth, "Determination of Anionic-Active Detergents by Two-Phase Titration," <u>Tensile</u> 4, 1967, pp. 292-304 |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

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| FORM PTO-1449 (Modified) LIST OF INFORMATION PROVIDED BY APPLICANT (Use several sheets if necessary) | | | | ATTY. DOCKET NO. TH1647 05 (US) | | APPLICATION NUMBER | |
| | | | | APPLICANT C. L. Edwards et al. | | | |
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| REFERENCE DESIGNATION | | | | | | | | U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|----|-----------------|----------|----------------|-------|----------|----------------------------|-----------------------|--|--|--|--|--|--|--|
| Examiner Initial | | Document Number | Date | Patentee | Class | Subclass | Filing Date If Appropriate | | | | | | | | |
| | BA | 4,482,531 | 11/13/84 | Kuehl | 423 | 329 | | | | | | | | | |
| | BB | 3,950,496 | 4/13/76 | Ciric | 423 | 328 | | | | | | | | | |
| | BC | 3,972,983 | 8/3/76 | Ciric | 423 | 328 | | | | | | | | | |
| | BD | 4,046,859 | 9/6/77 | Plank et al. | 423 | 328 | | | | | | | | | |
| | BE | 4,247,416 | 1/27/81 | Doherty et al. | 252 | 428 | | | | | | | | | |
| | BF | 4,086,186 | 4/25/78 | Rubin et al. | 252 | 430 | | | | | | | | | |
| | BG | 4,046,859 | 9/6/77 | Plank et al. | 423 | 328 | | | | | | | | | |
| | BH | 4,287,166 | 9/1/81 | Dwyer et al. | 423 | 325 | | | | | | | | | |
| | BI | 4,247,728 | 1/27/81 | Rubin et al. | 585 | 467 | | | | | | | | | |

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| | | Document Number | Date | Country | Class | Subclass | Translation | |
| | | | | | | | Yes | No |
| | BL | 06073045 | 3/15/94 | Japan | C07D | 273/08 | X | |
| | BM | 03261779 | 11/21/91 | Japan | C07D | 309/24 | X | |
| | BN | JP 11-349507 | 12/21/99 | Japan | C07C | 43/11 | X | |
| | BO | 100 20 899 A1 | 10/25/01 | Germany | C07D | 493/04 | X | |

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| BR | B. E. Gordon, H. Roddewig and W. T. Shebs, "A Double Label Radiotracer Approach to Detergency Studies," Journal of American Oil Chemists' Society, Vol. 44, No. 5 (1967) pp. 289-294 |
| BS | W. T. Shebs and B. E. Gorden, "Improvements in Detergency Precision With Radioactive Soil," Journal of American Oil Chemists' Society, Vol. 45, No. 5 (1968) pp. 377-380 |
| BT | W. T. Shebs, "Radioisotope Techniques in Detergency," Chapter 3, <u>Detergency Theory and Technology</u> , Marcel Dekker, Inc., New York (1987) pp. 125-191 |

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FORM PTO-1449 (Modified)

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| | CA | 4,495,303 | 1/22/85 | Kuehl | 502 | 62 | |
| | CB | 4,397,827 | 8/9/83 | Chu | 423 | 326 | |
| | CC | 4,640,829 | 2/3/87 | Rubin | 423 | 328 | |
| | CD | 4,568,654 | 2/4/86 | Valyocsik | 502 | 62 | |
| | CE | 4,698,217 | 10/6/87 | Valyocsik | 423 | 328C | |
| | CF | 4,647,442 | 3/3/87 | Derouane et al. | 423 | 306 | |
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| | CH | 4,954,325 | 9/4/90 | Rubin et al. | 423 | 328 | |
| | CI | 5,236,575 | 8/17/93 | Bennett et al. | 208 | 46 | |

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| | CM | | | | | | | |
| | CN | | | | | | | |
| | CO | | | | | | | |

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| | CR | Roger Hunter et al., "Allylation Using Allylborates," TETRAHEDRON, Vol. 50, No. 3, 1994, pp. 871-888 |
| | CS | Birgit Bartels et al., "A Selectivity of Activated Ketal Reduction With Borane Dimethyl Sulfide," JOURNAL OF ORGANIC CHEMISTRY, Vol. 58, No. 24, 1993, pp. 6756-6765 |
| | CT | T. Hosokawa et al., "Palladium (II)-Catalyzed Acetalization of Terminal Olefins Bearing Electron-Withdrawing Substituents With Optically Active Diols," JOURNAL OF ORGANIC CHEMISTRY, Vol. 52, 1987, pp. 1958-1764 |

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| | DA | 3,308,069 | 3/7/67 | Wadlinger et al. | 252 | 455 | |
| | DB | Re. 28,341 | 2/18/75 | Wadlinger, et al. | 208 | 120 | |
| | DC | 3,058,805 | 10/16/62 | Weber | 23 | 113 | |
| | DD | 3,130,007 | 4/21/64 | Breck | 23 | 113 | |
| | DE | 3,996,337 | 12/7/76 | Stabenow et al. | 423 | 328 | |
| | DF | 4,440,871 | 4/3/84 | Lok et al. | 502 | 214 | |
| | DG | 5,059,567 | 10/22/91 | Linsten et al. | 502 | 64 | |
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| | DI | 3,428,654 | 2/18/69 | Rubinfeld et al. | 260 | 327 | |

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| | DL | | | | | | |
| | DM | | | | | | |
| | DN | | | | | | |
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| | DR F. Wang et al., Synlett, (1998) pp. 245-245 |
| | DS A. A. Volkov et al., Dokl. Chem. 283, (1985), pp. 246-248 |
| | DT International Search Report of 5 July 2002 |

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| Examiner Initial | | Document Number | Date | Patentee | Class | Subclass | Filing Date if Appropriate |
| | EA | 3,420,875 | 1/7/69 | Di Salvo et al. | 260 | 513 | |
| | EB | 3,506,580 | 4/14/70 | Rubinfeld et al. | 252 | 138 | |
| | EC | 3,579,537 | 5/18/71 | Rubinfeld et al. | 260 | 327 | |
| | ED | 3,524,864 | 8/18/70 | Rubinfeld et al. | 260 | 327 | |
| | EE | 5,057,627 | 10/15/91 | Edwards | 568 | 618 | |
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| | EG | 6,083,893 | 7/4/00 | Zint et al. | 510 | 221 | |
| | EH | 6,159,920 | 12/12/00 | Ridyard | 510 | 324 | |
| | EI | 6,153,574 | 11/28/00 | Janssen | 510 | 224 | |

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| | | Document Number | Date | Country | Class | Subclass | Translation |
| | EL | | | | | | Yes No |
| | EM | | | | | | |
| | EN | | | | | | |
| | EO | | | | | | |

| OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.) | |
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| | ER Anionic Surfactants, Volume 7, Part I, edited by Warner M. Linfield, 1976 by Marcel Dekker, Inc. |
| | ES |
| | ET |

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| Examiner Initial | | Document No. | Date | Patentee | Class | Subclass | Filing Date if Appropriate |
| | FA | 2,778,855 | 1/22/57 | Shokal et al. | 260 | 613 | |
| | FB | 4,503,275 | 3/5/85 | Harris et al. | 568 | 866 | |
| | FC | 4,317,938 | 3/2/82 | Lutz | 568 | 619 | |
| | FD | 4,721,816 | 1/26/88 | Edwards | 568 | 618 | |
| | FE | 4,721,817 | 1/26/88 | Edwards | 518 | 618 | |
| | FF | 2,808,442 | 10/1/57 | Smith et al. | 260 | 611 | |
| | FG | 5,912,408 | 6/15/99 | Trinh et al. | 8 | 142 | |
| | FH | 4,544,512 | 10/1985 | Hozumi et al. | 558 | 169 | |
| | FI | Ser. No. 10/025,080 | 12/19/01 | Edwards et al. | | | |

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| | FL | | | | | | |
| | FM | | | | | | |
| | FN | | | | | | |
| | FO | | | | | | |

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